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Claims

1. A fluid dispensing device for spraying a fluid into a body cavity comprising a housing, a nozzle for insertion into a body cavity, a fluid discharge device moveably housed within the housing, the fluid discharge device comprising a
5 container for storing the fluid to be dispensed and a compression pump having a suction inlet located within the container and a discharge outlet at one end of the container for transferring fluid from the pump to the nozzle and a finger operable means to apply a force to the container to move the container towards the nozzle so as to actuate the pump wherein the finger
10 operable means comprises of at least one lever pivotally supported within the housing and driveably connected to the container so as to urge the container towards the nozzle when the or each lever is actuated by a user.
2. A fluid dispensing device as claimed in claim 1 in which there are two opposing levers each of which is pivotally connected to part of the housing
15 and is driveably connected to the container so as to urge the container towards the nozzle when the levers are squeezed together by a user.
3. A fluid dispensing device as claimed in claim 1 or in claim 2 in which the or each lever is driveably connected to the container near to said one end of the container.
- 20 4. A fluid dispensing device as claimed in of claims 1 to 3 in which the or each lever has a toothed portion for engagement with a toothed rack attached to the container so as to form the driveable connection therebetween.
5. A fluid dispensing device as claimed in claim 4 in which the container has a longitudinal axis and the or each toothed rack extends parallel to the
25 longitudinal axis of the container.
6. A fluid dispensing device as claimed in claim 4 or in claim 5 in which each toothed rack has two sets of opposed teeth, a first set of teeth for engagement

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with a first lever and a second set of teeth for engagement with a second lever.

7. A fluid dispensing device as claimed in any of claims 4 to 6 in which the container has a neck portion at said one end and the or each toothed rack is attached to the neck portion of the container so as to form in combination with each lever the driveable connection.
8. A fluid dispensing device as claimed in any of claims 4 to 7 in which the container has two toothed racks attached thereto.
9. A fluid dispensing device as claimed in claim 8 when dependent upon claim 7 in which the two toothed racks are arranged on opposite sides of the neck portion.
10. A fluid dispensing device as claimed in claim 9 in which the neck portion has a cylindrical outer surface and the two toothed racks are arranged diametrically opposite with respect to the neck portion.
11. A fluid dispensing device as claimed in any of claims 7 to 10 in which the or each toothed rack is connected to a collar used to attach the or each toothed rack to the neck portion of the container.
12. A fluid dispensing device as claimed in claim 11 in which the or each toothed rack formed as an integral part of the collar.
13. A fluid dispensing device as claimed in claim 12 in which the collar has two toothed racks formed as an integral part thereof.
14. A fluid dispensing device as claimed in any of claims 11 to 13 in which the cylindrical outer surface of the neck portion has a circumferentially extending groove formed therein in which a portion of the collar is engaged.
15. A fluid dispensing device as claimed in claim 14 in which the circumferentially extending groove defines an annular abutment surface against which the

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portion of the collar reacts when the or each lever is rotated to urge the container towards the nozzle.

16. A fluid dispensing device as claimed in any of claims 4 to 15 in which the or each lever has first and second toothed portions for engagement with
5 respective racks attached to the container.
17. A fluid dispensing device as claimed in claim 16 in which there is a first lever located on one side of the container and a second lever located on an opposite side of the container each having first and second toothed portions for engagement with respective racks attached to the container, therebeing a
10 first rack having a first set of teeth for engagement with the first toothed portion of the first lever and a second set of teeth for engagement with the first toothed portion of the second lever and a second rack having a first set of teeth for engagement with the second toothed portion of the first lever and a second set of teeth for engagement with the second toothed portion of the
15 second lever.
18. A fluid dispensing device as claimed in claim 16 or in claim 17 in which the or each lever is U-shaped in cross-section having first and second flanges joined together by a bridging portion.
19. A fluid dispensing device as claimed in claim 18 in which the first flange has
20 an end portion forming said first toothed portion and the second flange has an end portion forming said second toothed portion.
20. A fluid dispensing device as claimed in any preceding claim in which the or each lever is pivotally supported within the housing by a pivotal connection between the lever and a part of the housing.
- 25 21. A fluid dispensing device as claimed in claim 20 in which the housing has a front wall, a rear wall and two opposing side walls and the or each lever is pivotally connected to the front and rear walls.

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22. A fluid dispensing device as claimed in claim 20 or in claim 21 in which the housing has a front wall, a rear wall and two opposing side walls and at least one of the front wall and the rear wall has an aperture therein to view the level of the fluid in the container.
- 5 23. A fluid dispensing device as claimed in 21 or in claim 22 in which each lever projects outwardly from the housing through an aperture formed in a respective one of the side walls.
24. A fluid dispensing device as claimed in claim 23 in which the part of each lever which projects from the aperture forms a finger grip.
- 10 25. A fluid dispensing device as claimed in any of claims 1 to 19 in which the nozzle is formed as a part of a body member and the or each lever is pivotally supported within the housing by a pivotal connection between the lever and the body member.
- 15 26. A fluid dispensing device as claimed in any of claims 1 to 25 wherein the container contains a volume of fluid medicament formulation.
27. A fluid dispensing device as claimed in claim 26 wherein said fluid medicament formulation is in the form of a solution formulation.
- 20 28. A fluid dispensing device as claimed in claim 26 wherein said fluid medicament formulation is in the form of a suspension formulation.
- 25 29. A fluid dispensing device as claimed in any of claims 26 to 28 wherein the fluid medicament formulation comprises an anti-inflammatory medicament compound.
30. A fluid dispensing device as claimed in claim 29 wherein said medicament compound is a glucocorticoid compound.

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31. A fluid dispensing device as claimed in claim 30 wherein said glucocorticoid compound is selected from the group consisting of 6 α , 9 α -Difluoro-17 α -(1-oxopropoxy)-11 β -hydroxy-16 α -methyl-3-oxo-androsta-1,4-diene-17 β -carbothioic acid S-fluoromethyl ester; 6 α , 9 α -difluoro-17 α -[(2-furanylcarbonyl)oxy]-11 β -hydroxy-16 α -methyl-3-oxo-androsta-1,4-diene-17 β -carbothioic acid S-fluoromethyl ester; and 6 α ,9 α -Difluoro-11 β -hydroxy-16 α -methyl-17 α -[(4-methyl-1,3-thiazole-5-carbonyl)oxy]-3-oxo-androsta-1,4-diene-17 β -carbothioic acid S-fluoromethyl ester.

32. A fluid dispensing device as claimed in claim 29 wherein said medicament compound is selected from the group consisting of PDE4 inhibitors, leukotriene antagonists, iNOS inhibitors, tryptase and elastase inhibitors, beta-2 integrin antagonists and adenosine 2a agonists.

33. A fluid discharge device for use in a fluid dispensing device as claimed in any of claims 1 to 32 wherein the fluid discharging device comprises of a container having a longitudinal axis for storing a fluid to be dispensed and a compression pump attached to one end of the container, the pump having a suction inlet located within the container and a discharge outlet for transferring, in use, fluid from the pump to a nozzle wherein the container has at least one toothed rack attached thereto.

34. A fluid discharge device as claimed in claim 33 in which the or each toothed rack extends parallel to the longitudinal axis of the container.

35. A fluid discharge device as claimed in claim 33 or in claim 34 in which the or each toothed rack is attached to the container by being formed as an integral part of a collar attached to a neck portion of the container.

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36. A fluid discharge device as claimed in claim 33 or in claim 34 in which the or each rack is attached to the container by being formed as an integral part of the container.
- 5 37. A housing assembly for a fluid discharge device, the housing assembly comprising a housing for moveably supporting the fluid discharge device, a body having a nozzle extending therefrom for insertion into a body cavity and at least one toothed lever pivotally supported within the housing for toothed engagement with a container forming part of the fluid discharge device.
- 10 38. An assembly as claimed in claim 37 in which there is a first lever located on one side of the container and a second lever located on an opposite side of the container.
39. An assembly as claimed in claim 37 or in claim 38 in which the or each lever has first and second toothed portions for engagement with respective racks attached to the container.
- 15 40. An assembly as claimed in claim 39 in which the or each lever is U-shaped in cross-section having first and second flanges joined together by a bridging portion.
41. An assembly as claimed in claim 40 in which the first flange has an end portion forming said first toothed portion and the second flange has an end portion forming said second toothed portion.
- 20 42. An assembly as claimed in any of claims 37 to 41 in which the housing has a front wall, a rear wall and two opposing side walls and at least one of the front wall and the rear wall has an aperture therein to view the level of the fluid in the container.
- 25 43. An assembly as claimed in any of claims 37 to 42 in which the or each lever is pivotally supported within the housing by a pivotal connection between the lever and part of the housing.

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44. An assembly as claimed in claim 43 in which the housing has a front wall, a rear wall and two opposing side walls and the or each lever is pivotally connected to the front and rear walls.
- 5 45. An assembly as claimed in claim 42 or in claim 44 in which each lever projects outwardly from the housing through a respective aperture formed in a one of the side walls.
46. An assembly as claimed in claim 45 in which the part of each lever which projects from the aperture forms a finger grip.
- 10 47. An assembly as claimed in any of claims 37 to 42 in which the or each lever is pivotally supported within the housing by a pivotal connection between the body and the respective lever.
48. A fluid dispensing device for spraying a fluid into a body cavity substantially as described herein with reference to the accompanying drawings.
- 15 49. A fluid discharge device substantially as described herein with reference to the accompanying drawings.
50. A housing assembly for a fluid discharge device substantially as described herein with reference to the accompanying drawings.